

In regards to the Broadband over Power Lines (BPL) service, the commission is charged with a very difficult task. Existing licensed users of the 2-80mhz spectrum including many government, military, land mobile, maritime, broadcast, amateur and several large scale aviation technologies that prove to be critical safety of life and safety of flight systems for the aviation sector, both commercial and military. These existing licensees must be carefully protected in all aspects from any potential and proposed broadband use of this spectrum. We must keep in mind that many of these systems utilize the very basic radio communications principals, compared to many modern authorized modulation schemes in use today. This, in effect, elects these systems as redundant communications methods for many types of spectrum users, as well as primary communications methods. These modulation types are not immune or as resistant to a noise floor created by broadband use, and can seriously degrade and/or disrupt many of these services, especially in a time of dire need, such as disaster, terrorist attack, and other emergency situations. The commission should examine the deep technical issues that surround these BPL systems, and adopt strict rulemakings that protect the inherited authorizations of the primary users of this spectrum. Many NTIA authorized systems are also potentially affected by these proposals.

Similarities to the 800MHZ band interference issues that exist today (NEXTEL>IDEN), can be compared to the BPL issues. The interference caused by SMRS carriers to incumbent analog 800mhz public safety and the remaining private networks is a prime example that newer digital systems with new types of modulation schemes are often unfriendly to the analog neighbor. This is an example that it is often irresponsible to interleave technologies that may not be considerate to a neighboring system. Further, it should be considered that 2nd 3rd 4th 5th, possibly higher order harmonics created by this technology could cause interference issues to adjacent bands, comprising of weak signal aeronautical navigation beacons (AM), the civil aviation voice band (AM), and potential interference to other VHF and UHF band users, many of which are safety of life systems.

In reading previous comments by other interested parties, it is apparent there is much concern about these technologies among existing licensed services. The commission should not only consider these comments, but should keep in mind these systems are the primary users of these bands. Irreversible damage and millions of private and public dollars will have to be needlessly spent if this issue is not dealt with with patience and thoroughness.

Potential BPL proposals should further see the value and critical nature of this issue, and should allow time for the proper engineering and examinations to take place at the regulatory level to ensure if BPL systems are ready for deployment, or if further development should take place beforehand